Appendix J

Change Control Form for Accelerator Facilities

[Instructions for using form: All instructions in square brackets are to be removed from the final document. All italicized items are to be REPLACED by the appropriate facility or other information (and reformatted). Shaded parts of the form are to be used only if required by the content of the document and should be deleted if not required.]

BUILDING *XXX*

Unreviewed Safety Issue

USI No.: *BXXX-###—Yr*

Title of facility management organization

Date

☐ This issue does not constitute a safety issue **[**all answers are no**]**. The cognizant facility manager approves continued operation.

☐ This issue does constitute a safety issue **[**one or more yes answers**]**. The original authorizing office approves continued operation.

Prepared by: _____

Name, Title or Function Date

[e.g., Safety Analyst]

Operation Approved by: _____

Name, Title or Function Date

[e.g., Facility Manager or Original Authorizing Office]

Part I Introduction

An unreviewed safety issue has been identified resulting from:

- ☐ A proposed change of inventory or operations.
- ☐ A newly noted potential safety hazard.
- ☐ A discovery that previous safety analyses were inadequate.

This evaluation of the safety issue is summarized in the following Parts II through V.

- ☐ See attachment for details of analysis and supporting documentation.
- ☐ No attachments.

1. Issue:

   Describe the information being evaluated and the operation that it affects.

2. References used to perform the safety evaluation:
   [Add or remove references as appropriate.]

   LLNL EIS/EIR
   FSPs, OSPs *optional*
   Existing Safety Assessment

Part II Impact on the Existing Operation

1. Controls and equipment that are affected:
   List existing controls and equipment that are affected by the new information. Identify any of these structures, systems, or components (SSCs) that are essential for protection of the public (required to protect the public or prevent adverse environmental effects) or workers (required to prevent acute worker fatality or serious injuries to workers).

2. New SSC failure modes:
   Describe how the new information changes understanding of the ways in which the existing controls and equipment might fail.

3. List the accidents in the existing safety basis that are controlled by affected SSCs:
   Identify any previously analyzed or considered accidents that are affected by the changed failure modes.

4. Effect of SSC failure on existing safety basis:
   Describe how these accidents are affected, including new means of initiation, changes in probability, and changes in consequence.

Part III Potential for a New Accident

1. Describe any possible new accidents:
   Identify each accident type with enough detail to suggest possible scenarios to be analyzed. Use the Analysis Level Matrix to determine if accident analysis is required.

2. Analysis of accident:
   Provide an appropriate analysis of the probability and consequence of the new accident. This may be the equivalent of a hazard analysis (as described in Section 2.4) or it may be an accident analysis (as described in Section 2.5). A short analysis may be entered here. For more detailed analysis, provide a summary here and append the details to this Form.

Part IV Impact on the Accelerator Safety Envelope

1. Affected Accelerator Safety Envelope (ASE) elements:
   List operating limits, access controls and other controls shown in the SAD to be essential to safety that are affected.

2. Compare the existing operating conditions to the ASE elements:
   Examples: Normal beam energy vs. limiting energy, radiation field intensity vs. shielding requirements and detector alarm settings.

3. Compare the new operating conditions to the ASE elements.
   Identify any in which the operating conditions have come significantly closer to their limits.

4. Required new ASEs:
   Examples: New radiation detectors, new shield configuration, longer cool-off after beam shutdown.

5. ASE changes:
   Describe changes to existing ASEs required to provide safety because of this safety issue.

Part V Summary and Conclusions

Summary Questions		**Yes**	**No**
Is the probability of a safety system malfunction higher than previously expected?	(Part II Item 2)	☐	☐
Are the probability or consequences of a previously analyzed accident increased?	(Part II Item 4)	☐	☐
Is there potential for a new type of accident?	(Part III)	☐	☐
Is the safety of operation decreased?	(Part IV Item 3)	☐	☐
Are any new ASEs needed?	(Part IV Item 4)	☐	☐
Are there any changes to the ASEs needed?	(Part IV Item 5)	☐	☐

☐ This issue does not constitute a safety issue (all answers are no). The cognizant facility manager approves continued operation.

☐ This issue does constitute a safety issue (one or more yes answers). The original authorizing office approves continued operation.